plan of reducing the number of courses necessary to a degree from eighteen to sixteen, but it was rejected by the overseers.

Converse College established about five years ago at Spartanburg, S. C., has received a gift of $70,000 from Mr. D. E. Converse, together with $30,000 given by the citizens of Spartanburg, S. C.

At a meeting of the Council of the University of the City of New York, the University medical faculty reported in favor of extending the course for degrees of doctor from three to four years. The Council approved a plan for a College Close which includes an inner court measuring about 250 feet in width by 300 feet in length. Fronting upon this, five residence halls and a dining hall will be built.

DISCUSSION AND CORRESPONDENCE.

KEW'S DISPERSAL OF SHELLS.

Editor of Science: In the review of Kew's *Dispersal of Shells* by Dr. Packard, the reviewer points out certain omissions which could not have been overlooked by Mr. Kew if he had taken the trouble of consulting either Gould or Binney in the original. For a volume of the International Series the book is amazingly provincial. I do not wish by this expression to gainsay its value; it is an exceedingly valuable collection of notes, memoranda and isolated items referring more particularly to the dispersal of shells in England. Dr. Packard has inadvertently overlooked a very important omission in there being no reference to the dispersal of Litorina litorea from its centre at Halifax, Nova Scotia (where it was first introduced from the other side of the Atlantic) along the shores of the Bay of Chaleur, and southward to New York and beyond. In Science News for 1879 Mr. Arthur F. Gray called attention to the successive occurrence of this species as it spread southward along the coast. Professor Verrill in the American Journal of Science, for Sept., 1880, records his observations regarding the dispersion of this species. In the Essex Institute Bulletin for 1880, in a paper on the Gradual Dispersion of Certain Mollusks in New England, I presented a map of the New England coast and upon this was marked chronologically the dates of the appearance of this large and conspicuous mollusk as it found its way south. In this paper I showed what a barrier Cape Cod offered for some years. My last find was at Glen Cove, Long Island. In the same paper I called attention to the dispersion of Pupa muscorum (badia, of Adams) from its first place of observation in Vermont, into various parts of New England. I think Binney was wrong in believing that Helix hortensis was introduced into New England since the advent of the European. I have discovered Helix hortensis on islands in Casco Bay, buried in the lowest deposits of shell heaps containing bones of the Great Auk. The occurrence of this species in such positions could not be accounted for by supposing that the creature had burrowed down to the lowest level of the deposits, for the mass was too compacted to admit of this explanation. I have found them under stones resting on the primitive surface of the ground associated with other species found only in hard wood growths, and now coniferous trees only abound in these places. It is certainly extraordinary that this species is only found living on the outer islands of New England—its habits being entirely different in this respect from its English relative.

Edward S. Morse.

Salem, February 18, 1896.

'SCIENTIFIC MATERIALISM.'

Editor of Science: A few remarks on the article 'Scientific Materialism' in Science, February 14th, may not be out of place.

It seems a case of 'reversion' to speak of 'energy' as something distinct from force, or rather from definite forces. Energy apart from force is inconceivable. To quote Lewis' example, we might as well speak of 'cellarity,' as something apart from cellars!

The definite forces with which science deals are, as every one knows, simply modes of motion. Hence Helmholtz, Tait, Romanes and most modern students have regarded matter, atoms, molecules, all as but expressions of motion, and to be analyzed by the three primary laws of motion and the theorems derived from them. Of course this leads inevitably to a strictly mechanical conception of phenomenal existence.